

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claim 28 has been amended to correct a typographical error.

Claims 35 and 36 stand withdrawn for being directed toward non-elected subject matter.

Claims 27-32 stand rejected, under 35 USC §103(a), as being unpatentable over Li et al. (US 2002/0119781) in view of Parantainen et al. (US 7,092,373) and Wang et al. (US 2001/0028677). Claims 33 and 34 stand rejected, under 35 USC §103(a), as being unpatentable over Li in view of Parantainen, Wang, and Khan (US 2004/0179493). The Applicant respectfully traverses these rejections as follows.

Claim 27 defines a base station that transmits user data on a user channel and transmits simultaneously on a control channel: (i) first allocation information indicating resources allocated for ACK/NACK signals that a mobile station returns to the base station in response to receiving the user data and (ii) second allocation information indicating the destination of the user data. The claimed subject matter supports an advantage of improving data throughput.

The Final Rejection proposes that Li discloses, in paragraph [0044], transmitting on a control channel: (a) subcarrier cluster allocation information and (b) a destination address of user data (see Final Rejection section 3, lines 10-15). More specifically, with regard to item (b), the Final Rejection proposes that Li discloses that a base station notifies a subscriber (i.e., thereby indicating the destination) (see section 3, lines 12-13).

However, Li discloses notifying a subscriber about a subcarrier cluster allocation (see Li paragraph [0044], lines 1-2). And the Final Rejection acknowledges that the subcarrier cluster

allocation is control information communicated over a control channel (see Final Rejection section 3, lines 10-11 and 15-19). Because: (i) Li's subcarrier cluster allocation is control information communicated through a control channel, as acknowledged in the Final Rejection and (ii) Li expressly discloses that a base station notifies a subscriber about the cluster allocation information, it necessarily follows that Li's disclosed notification cannot relate to the destination address of user data communicated through a user channel; instead, the notification must relate to the control information communicated through the control channel.

Thus, Li does not disclose the Applicant's claimed subject matter of transmitting, on a control channel, information indicating the destination of user data. Parantainen and Wang are not cited in the Final Rejection for supplementing Li's disclosure in this regard.

Applicant similarly presented this argument in the Amendment dated September 25, 2009 (see Amendment dated September 25, 2009, page 6, second to last paragraph, through page 7, second paragraph). Although the Final Rejection cites the additional reference of Wang in the present rejection of claim 27, Wang is not cited in the Final Rejection for supplementing the disclosure of Li with regard to the Applicant's claimed subject matter discussed above and in the Amendment dated September 25, 2009, for distinguishing claim 27 from the prior art.

And although the Final Rejection proposes that Applicant's argument in the Amendment dated September 25, 2009, is moot due to the new ground of rejection (see Final Rejection page 6, third paragraph), Applicant respectfully submits that such is not the case. The basis for the final rejection and that for the previous rejection of claim 27 are identical with regard to the above-mentioned subject matter distinguishing claim 27 from the prior art. Thus, the Final

Rejection has improperly failed to rebut Applicant's distinguishing remarks relating to this subject matter.

Because the Final Rejection fails to rebut Applicant's basis for distinguishing claim 27 from the prior art, the Final Rejection has failed to establish a *prima facie* basis for rejecting claim 27 and failed to shift the burden of persuasion onto Applicant. Independent claim 30 similarly recites the above-mentioned subject matter distinguishing apparatus claim 27 from the applied references, but with respect to a method, and claim 36 similarly recites this distinguishing subject matter, but with respect to a mobile station that receives the above-mentioned information transmitted by the base station of claim 27. Therefore, withdrawal of both: (a) the rejections applied to claims 27, 30, and 36 and all claims dependent therefrom and (b) the finality of these rejections is warranted.

Moreover, as discussed above, claim 27 recites a base station that simultaneously transmits first allocation information and second allocation information on a control channel, where the first allocation information indicates a resource to be used by a mobile station for transmitting an ACK/NACK signal in response to user data transmitted on a user channel by the base station and the second allocation information indicates the destination of the user data transmitted on the user channel by the base station. With such subject matter, if either the first allocation information or the second allocation information is lost, the user data needs to be retransmitted. That is, in the case where only the second allocation information indicating the destination of downlink user data is lost, the user data itself cannot be read and, therefore, needs to be retransmitted. Also, in the case where only the first allocation information indicating a resource for an ACK/NACK signal is lost, even if a mobile station can read the user data, the

mobile station cannot report an ACK to a base station and, therefore, a retransmission likewise occurs.

If the first and second allocation information are transmitted at different time, the risk of losing one of these items of information increases. As a result, the possibility of requesting a retransmission increases, which degrades the throughput. Focusing on this point, the Applicant's claimed invention simultaneously transmits the first and second allocation information, thereby providing an advantage of suppressing the risk of losing one of these items of information and, as a result, improving the throughput.

By contrast, Li does not disclose the following three points, which constitute features of the Applicant's claimed invention:

(1) first allocation information indicating a resource to be used by a mobile station for transmitting an ACK/NACK signal in response to user data transmitted on a user channel by a base station;

(2) second allocation information indicating a destination of user data transmitted on a user channel by a base station; and

(3) simultaneously transmitting the first allocation information and the second allocation information.

Regarding the above point (1), the Final Rejection acknowledges that Li fails to specifically disclose the resource to be used for transmitting an ACK/NACK signal in response to user data transmitted by the base station. To overcome this deficiency, the Final Rejection proposes that Parantainen discloses a base station that transmits information on an uplink channel to be used for acknowledgements and that it would have been obvious to a skilled artisan to

modify Li's allocated resource so as to transmit an ACK/NACK signal and, thereby, make sure the data is successfully transmitted.

However, Applicant respectfully submits that there is no motivation for modifying Li's allocated resource to be used for transmitting an ACK/NACK signal based on the disclosure of Parantainen. Parantainen discloses providing an acknowledgement on an uplink control channel (see Parantainen col. 9, lines 27-29). That is, Parantainen's resource used for an acknowledgement is the control channel resource. On the other hand, Li's paragraph [0036] discloses a resource allocation for a data traffic channel. That is, the allocated resource disclosed in Li is the resource for a data traffic channel. Also, Li's paragraph [0036] discloses not disclose performing allocation (i.e., pre-allocation) on a control channel. Therefore, there is no motivation for modifying Li's allocated resource, which is not a control channel resource, into Parantainen's control channel resource used for acknowledgement.

Regarding the above point (2), the Final Rejection proposes that Li discloses the Applicant's claimed second allocation information indicating the destination of user data, on the grounds that Li's paragraph [0044] discloses that a base station notifies a subscriber. However, Li's paragraph [0044] discloses that the base station notifies the subscriber about a cluster allocation, which simply means that a cluster allocated by a base station is notified to a subscriber. That is, what Li's base station notifies is a cluster allocation. Li's base station notifies a subscriber about cluster allocation, and, consequently, even if it is presumed that Li suggests information indicating the destination of something, Li merely indicates the destination to which cluster allocation is notified.

Also, the Final Rejection proposes that the Applicant's claimed first allocation information corresponds to Li's disclosed cluster allocation. Thus, it naturally follows that Li suggests indicating the destination of the first allocation information.

However, the Applicant's claimed second allocation information indicates the destination of user data. This user data is subject to an ACK/NACK signal transmitted using a resource indicated by the first allocation information and, therefore, differs from the first allocation information. That is, the technique disclosed in Li is directed to indicating the destination of cluster allocation (which the Final Rejection equates to the claimed first allocation information) and is not directed to indicating the destination of user data, which differs from cluster allocation.

Also, Li's paragraphs [0081] to [0083] disclose user data, which Li clearly distinguishes from the cluster allocation and fail to disclose or suggest indicating the destination of that user data.

From another perspective, according to the Applicant's claimed invention, the first allocation information is the uplink resource allocation information for an ACK/NACK signal transmitted from a mobile station to a base station, while the second allocation information is the downlink resource allocation information for user data transmitted from the base station to the mobile station. Regarding this, the Final Rejection proposes modifying Li's allocated resource, which the Final Rejection proposes corresponds to the claimed first allocation information, into Parantainen's resource to be used for transmitting an ACK/NACK signal.

However, such a modification would only provide uplink resource allocation information for transmitting an ACK/NACK and would not provide user data allocation information that is

equivalent to the Applicant's claimed second allocation information that is downlink resource allocation information.

Therefore, Applicant submits that Li does not disclose the Applicant's claimed feature of providing second allocation information indicating the destination of user data. If the Office continues to reject claim 27 on the ground that Li discloses the Applicant's claimed second allocation information indicating the destination of user data, Applicant requests the Office to expressly identify the location of such disclosure within Li's publication.

Regarding the above point (3), as described above, Li does not disclose providing first allocation information and second allocation information. Thus, it naturally follows that Li fails to disclose or suggest transmitting first allocation information and second allocation information simultaneously. Also, Parantainen and Wang do not disclose or suggest features supporting Li in achieving the above point (3).

Accordingly, Applicant submits that the teachings of Li, Parantainen and Wang, even if combined as proposed in the Final Rejection, still would lack the above-noted features of claim 27 and thus these references, considered individually or in combination, do not render obvious the subject matter defined by claim 27. Independent claim 30 similarly recites the above-mentioned subject matter distinguishing apparatus claim 27 from the applied references, but with respect to a method, and claim 36 similarly recites this distinguishing subject matter, but with respect to a mobile station that receives the above-mentioned information transmitted by the base station of claim 27. Therefore, allowance of claims 27, 30, and 36 and all claims dependent therefrom is considered to be warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

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